

# WILDLIFE FOOD PLOT (645)

# Biology Job Sheet #2

# Natural Resources Conservation Service (NRCS) - Minnesota

# **DEFINITION**

A food plot is an annual or perennial planting of grain, grass or legumes to provide food for a variety of wildlife on rural land.



## **USES OF FOOD PLOTS**

A food plot adds plant diversity, food and cover to the landscape. It can also be considered where land is planned to provide a winter or early spring food source. Where fall plowing buries the majority of crop residue, food plots are an excellent choice to encourage wildlife survival.

Without a reliable food source, even the best winter cover is useless to wildlife.

#### PLANNING CONSIDERATIONS

- The recommended food plot size 2-5 acres with a minimum size of 1/4 acre. However, large 3-10 acre plots may be desirable for countering winter blizzards and can serve as both winter food and cover.
- Annual plots should be configured in a block or square as opposed to linear plots, to counter winter snow drifting. Minimum width of food plot will be 33 feet.
- Annual food plots should be located adjacent to winter cover on the downwind side. Snow drifting into food plots can be lessened by establishing snow traps. Harvest 12-20 rows just inside of the outer 4-6 rows on the windward side.

- Perennial food plots should be located downwind from protected areas to minimize snow accumulation.
- Locate food plots within ¼ mile of quality winter cover.
- Food plots should be located on the least erosive areas of each field. Adequate vegetative cover must be developed and maintained to provide both wildlife and erosion control benefits. If food plots are relocated or discontinued, the site will be re-established to acceptable cover.
- Food plots may be located on slopes > 5% provided soil losses do not exceed tolerable levels. Food plots planted on the contour are recommended.
- Plantings shall be seeded early enough to assure maturity of food plants.

## **SPECIFICATIONS**

Site-specific requirements will be listed on the attached specification sheet. Additional provisions are entered on the practice sketch sheet. Specifications are prepared in accordance with the NRCS Field Office Technical Guide practice standard 645-Upland Wildlife Habitat Management.

# RECOMMENDED WILDLIFE FOOD AND PLANTING DEPTH

Food Type ANNUALS	Seeding Rate (lbs/acre)	Seeding Depth (inches)
Corn (short duration)	15.0	0.5 - 2.0
Sorghum	15.0	1.0 - 2.0
Sunflowers (oil)	4.0	1.0 - 2.0
Soybeans	45.0	1.5 - 2.0
Buckwheat	40.0	1.0 - 2.0
Millets	20.0	0.5 - 1.0
Barley/Spring Wheat	80.0	1.0 - 2.0
Flax	40.0	1.0 - 2.0
Rye/Winter Wheat	65.0	1.0 – 2.0

Food Type PERENNIAL <u>1/</u>	Seeding Rate (lbs/acre)	Seeding Depth (inches)
Alfalfa	15.0	1/4 - 1/2
Red Clover	10.0	1/4 - 1/2
Alsike Clover	6.0	1/4 - 1/2
Ladino Clover	5.0	1/4 - 1/2
DutchWhite Clover	5.0	1/4 - 1/2

#### 1

- \* Select a winter hardy variety adapted to the site.
- \* Recommended companion crop for spring seeding Oats at 34 1 1/4 bushel/acre.

# RECOMMENDED PLANTING DATES

Food	Planting Date
Corn	May 1
Sorghum	May 15
Sunflowers, Soybeans, Millets	May 1
Buckwheat	June 1
Barley, Spring wheat	April 1
Rye, Winter wheat	Aug. 20 – Sept. 20
Flax	April 15
Alfalfa, Clovers	April 1 or August 1

# RECOMMENDED RANGE AND SUITABILITY

## ANNUAL FOOD PLOTS:

Target Species: Upland game birds, White-tailed deer.

**Function:** Primarily to establish safe winter foraging areas that restrict unnecessary movements, and provide a dependable winter food source to carry game through the winter in good condition. Food plots provide additional value as winter cover.

Suitability: Statewide.

#### PERENNIAL FOOD PLOTS:

**Target Species:** Ruffed Grouse, Moose, Elk, and Forestland Deer

**Function:** Provide open space and foraging areas for large mammals and woodland game birds.

**Suitability:** North of Highway 10, and East of Highways 52/56 from the Twin Cities to the Iowa border.

# FERTILIZER AND LIME CONSIDERATIONS

To determine the need for commercial fertilizer and liming materials, a soil test from the current planting year or during the previous two years is recommended for annual and perennial food plots.

## **ANNUAL FOOD PLOTS:**

• The rate of application of commercial fertilizer shall be from 75-100% of the University of Minnesota recommended rate per acre of each nutrient for the species being established for a low to moderate yield goal. If a soil test is not available, apply 350 lbs of 20-10-10, or equivalent, per acre.

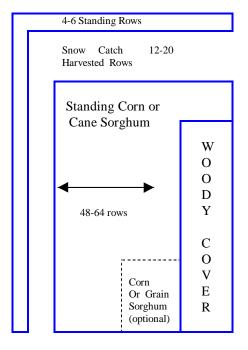
## PERENNIAL FOOD PLOTS:

- The rate of application of commercial fertilizer shall be from 75-100% of the University of Minnesota recommended rate per acre of each nutrient for a 3 ton yield goal for the species being established.
- The recommended per acre rate of liming material shall be used to raise the pH to 6.3 for Alfalfa or 6.0 for other legume species. Liming materials shall be applied and incorporated prior to seeding.

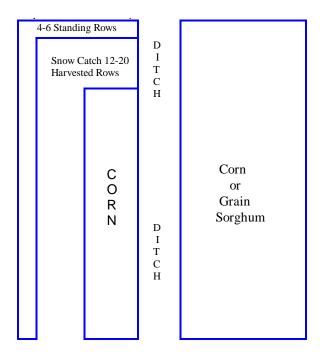
## **OPERATION AND MAINTENANCE**

- 1. Control all noxious weeds as identified by state and local laws, by; (1) treating with chemicals per label directions, or (2) spot mow before seed heads form. Delay the use of control measures until after August 1st to protect nesting wildlife
- 2. Protect the acres from unplanned haying and grazing. Fences may need to be constructed and maintained to exclude livestock.
- 3. Perennial legume food plots generally will not persist beyond 5-6 years. Manage perennial vegetation every 3-5 years after adequate vegetative establishment. Management may include one or more of the following options: (1) mowing with residue removed or spread evenly across the field, (2) light disking, (3) top dressing with fertilizer (P at 40 lbs/ac and K at 60 lbs/ac), or (4) re-establishment. Management activities, which substantially disturb the vegetative cover, should take place prior to May 1 or between August 1 September 1.
- 4. Plots shall be planted early enough to assure maturity of food plants.

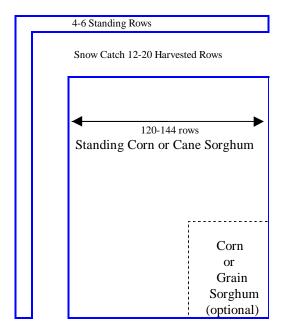
# **EXAMPLES OF ANNUAL FOOD PLOT DESIGNS**



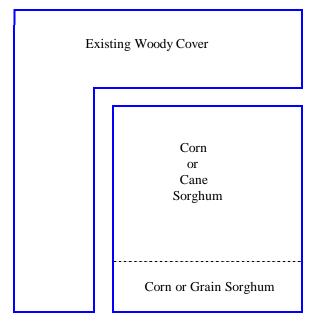
A. Plot designed to protect existing winter cover. Size: 3-4 acres.



B. Plot designed to enhance drainage ditch or other area. Size: 2-3 acres.



C. Plot designed to function alone. Size: 5-10 acres. woody cover.



D. Plot designed to take advantage of existing

Size: 5-10 acres

Species	Strain or Variety	(1) Seeding Rate Bulk Ibs/ac.	(2) Acres to be seeded	(1x2) Total bul pounds needed	
	1	l	1		
Specific Recommendations:					
Scheduled Date					
Companion Crop	Seeding Dates				
-		Seeding Dates			
-		•			
Seedbed Preparation Method Lime - Fertilizer Recommendations					
Seedbed Preparation MethodLime - Fertilizer					
Seedbed Preparation MethodLime - Fertilizer					
Seedbed Preparation MethodLime - Fertilizer					
Seedbed Preparation MethodLime - Fertilizer					

The United States Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, sex, religion, age, disability, political beliefs, sexual orientation and marital or family status. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large Print, audiotape, etc.) should contact USDA 's Target Center at (202)-720-2600 (voice and TDD).

To file a complaint of discrimination, write the USDA, Director, Office of Civil Rights, Room 326W, Whitten Building, 14<sup>th</sup> and Independence Ave. SW. Washington D.C., 20250-9410, or call (202) 720-5964 (voice and TDD). USDA is an equal opportunity provider and employer.